

Appln. No. 10/679,883
Amendment dated January 26, 2006
Reply to Office Action of December 19, 2005

REMARKS

Claims 1-26 remain in the application. In the office action, the Examiner finally rejected claims 1, 5 and 6, allowed original claims 10-20 and new claims 21-26 and objected to claims 2-4 and 7-9 as being dependent upon a rejected base claim, but would allowable if rewritten in independent form to include all the limitations of the base claims and any intervening claims.

The Examiner rejected claims 1-9 under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner cannot find a positive recitation of establishing a dielectric constant for the fluid and a baseline constant in the specification. The Examiner requests correction and/or an explanation.

Additionally, the Examiner rejected independent claim 1 and dependent claims 5-6 under 35 USC §103(a) as being unpatentable over Hufton et al. (USPN 4,599,888) in view of Park et al. (USPN 6,553,812). As understood, the Examiner relies on Hufton et al for teaching Applicants' invention except for the establishment of a dielectric constant for the fluid. The Examiner relies on Park et al. for this teaching.

Applicants cited the Hufton et al. patent in the specification as prior art where Hufton et al. fails to teach an aeration detection system capable of discerning between gas and other impurities entrapped within the engine oil. Therefore, Hufton, et al. assumes that any change in capacitance of the oil is the

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result of aeration, Hufton et al. cannot differentiate the source in the change of capacitance. Hufton et al. cannot differentiate between contaminants in the lubricant causing a capacitance change and aeration in the system causing capacitance change, even when combined with the teachings of Park et al. as suggested by the Examiner. Park et al. measures a fluid's dielectric constant without comparing this measurement to a second measured dielectric constant. Park et al., like Hufton et al., therefore has no basis for comparing measurements.

In sharp contrast, Applicants' invention, as now more clearly defined in claim 1 and supported in the Specification on page 6, lines 27-32, and more specifically, page 7, lines 1-11, compares a fluid's known dielectric to a measured dielectric constant. A fluid's dielectric constant, although constant per se, is dependent on the brand of fluid used, as between different motor oils, the temperature of the fluid, and the hours of use within a system, among other factors. Applicants' novel invention measures the constant of the fluid in the system pre-aeration and post de-aeration. The known dielectric constant provides a measure of capacitance of de-aerated oil (the second capacitor 48) within the system for comparison with a measure of capacitance of the flowing oil (the first capacitor 43), providing the ability to differentiate the source in the change of the capacitance.

The foregoing amendments are taken in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicants would otherwise be entitled in view of the prior art.

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By amending the application, Applicants do not concede that the patent coverage available to them would not extend as far as the original claim. Rather, Applicants intend to file a continuation application to pursue the breadth of the claims as filed. Applicants believe that the Examiner has not made a sufficient showing of inherency of the teachings of the asserted prior art, especially given the lack of teachings in the cited references of the properties that Applicants have recited in their claims.

Further, by the present amendment, it does not follow that the amended claims have become so perfect in their description that no one could devise an equivalent. After amendment, as before, limitations in the ability to describe the present invention in language in the patent claims naturally prevent the Applicants from capturing every nuance of the invention or describing with complete precision the range of its novelty or every possible equivalent. See, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 62 USPQ2d 1705 (2002). Accordingly, the foregoing amendments are made specifically in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicants would otherwise be entitled.

CONCLUSIONS

In view of Applicants' amendments and remarks, the Examiner's rejections are believed to be rendered moot. Accordingly, Applicants submit that the present application is in condition for allowance and requests that the Examiner pass the case to issue at the earliest convenience. Should the Examiner have

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any question or wish to further discuss this application, Applicants request that the Examiner contact the undersigned at (248) 258-3877.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge our Deposit Account No. 12-2136 for any fee which may be due.